

WHAT IS CLAIMED IS:

1. A polyurethane dispersion comprising a mixture of a polyisocyanate and a molecule having hydrogen active moieties, optionally a chain extender and/or a surfactant wherein the polyisocyanate comprises a bis(isocyanatomethyl)cyclohexane compound.
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2. The dispersion of Claim 1 wherein the polyisocyanate comprises (i) trans-1,4-bis(isocyanatomethyl)cyclohexane or (ii) an isomeric mixture of two or more of cis-1,3-bis(isocyanatomethyl)cyclohexane, trans-1,3-bis(isocyanatomethyl)cyclohexane, cis-1,4-bis(isocyanatomethyl)cyclohexane and trans-1,4-bis(isocyanatomethyl)cyclohexane,
10 with the proviso said isomeric mixture comprises at least about 5 weight percent of said trans-1,4-bis(isocyanatomethyl)cyclohexane.
3. The dispersion of Claim 2 wherein the polyurethane is dispersed in an aqueous medium.
4. The dispersion of Claim 3 wherein the aqueous medium contain less
15 than 5 percent residual organic solvent.
5. The dispersion of Claim 1 wherein the molecule having hydrogen active moieties is a polyol or polyol blend having a weight average molecular weight of 300 to 10,000 and an average functionality of 1.8 to 4.5.
6. The dispersion of Claim 5 wherein the polyol is an aliphatic or
20 aromatic polyol selected from a polyester, a polyether, polylactone, polyolefin, polycarbonate or a blend thereof.
7. The dispersion of Claim 1 wherein the dispersion contains a polyamine chain extender.
8. The dispersion of Claim 7 wherein the chain extender is selected
25 from piperazine, ethylenediamine or bis(aminomethyl)cyclohexane.
9. The dispersion of Claim 1 wherein the dispersion contains 30 to 75 weight percent solids.
10. The dispersion of Claim 1 wherein the dispersion contains an anionic, ionic, cationic or zwitterionic external surfactant.
- 30 11. The dispersion of Claim 1 wherein the dispersion is stabilized by means of an internal surfactant.

12. A method of producing a polyurethane dispersion comprising mixture a polyisocyanate and a molecule having hydrogen active moieties, optionally a chain extender and/or a surfactant wherein the polyisocyanate comprises a bis(isocyanatomethyl)cyclohexane compound.

5 13. A coating, film, elastomer or microcellular foam produced from the dispersion of Claim 1.

14. A ultraviolet or light stable coating, film or elastomer produced from the dispersion of Claim 1.

10 15. The dispersion of claim 2 wherein the polyisocyanate contains 0.1 to 20 percent by weight of at least one polyisocyanate other than bis(isocyanatomethyl)cyclohexane.